6HM5/6HA5

High-Mu Triode

7-PIN MINIATURE TYPE

Useful as Grounded-Cathode RF-Amplifier Tube in VHF Tuners

Electrical:

Heater Characteristics and Ratings:		
Voltage (AC or DC)	6.3 ± 0.6	volts
Current at heater volts = 6.3	0.180	amp
Peak heater-cathode voltage:		
Heater negative with respect to cathode	110 max.	volts
Heater positive with respect to cathode	110 max.	volts
Direct Interelectrode Capacitances:[a]		
Grid to plate	0.36	pf
Grid to cathode, internal shield, external shield, and heater	4.3	pf
Plate to cathode, internal shield, external shield, and heater	2.9	pf
Cathode to plate	0.080	pf
Cathode to grid, internal shield, external shield, and heater	3.1	pf
Heater to cathode	2.3	pf
Heater to grid	0.070 max.	pf

Characteristics, Class A_1 Amplifier:

Plate Voltage	135	volts
Grid Voltage	-1	volt
Amplification Factor	72	
Plate Resistance (Approx.)	5000	ohms
Transconductance	14500	µmhos
Plate Current	11.5	ma
Grid Voltage (Approx.) for Transconductance (µmhos) = 150	-5.7	volts

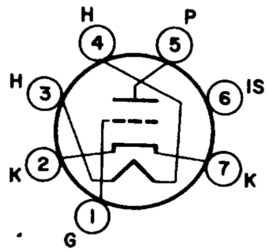
Mechanical:

Operating Position	Any
Type of Cathode	Coated Unipotential
Maximum Overall Length	2-1/8"
Maximum Seated Length	1-7/8"
Length, Base Seat to Bulb Top (Excluding tip)	1-1/2" ± 3/32"
Diameter	0.650" to 0.750"
Dimensional Outline	See *General Section*
Bulb	T5-1/2
Base	Small-Button Miniature 7-Pin (JEDEC No.E7-1)

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Basing Designation for BOTTOM VIEW. 7GM

Pin 1 - Grid
Pin 2 - Cathode
Pin 3 - Heater
Pin 4 - Heater



Pin 5 - Plate
Pin 6 - Internal Shield
Pin 7 - Cathode

AMPLIFIER — Class A$_1$

Maximum Ratings, *Design-Maximum Values:*

Plate Supply Voltage.	600 max.	volts
Plate Voltage	220 max.	volts
Grid Voltage:		
Negative-bias value	50 max.	volts
Positive-bias value	0 max.	volts
Cathode Current	22 max.	ma
Plate Dissipation	2.6 max.	watts

Typical Operation:

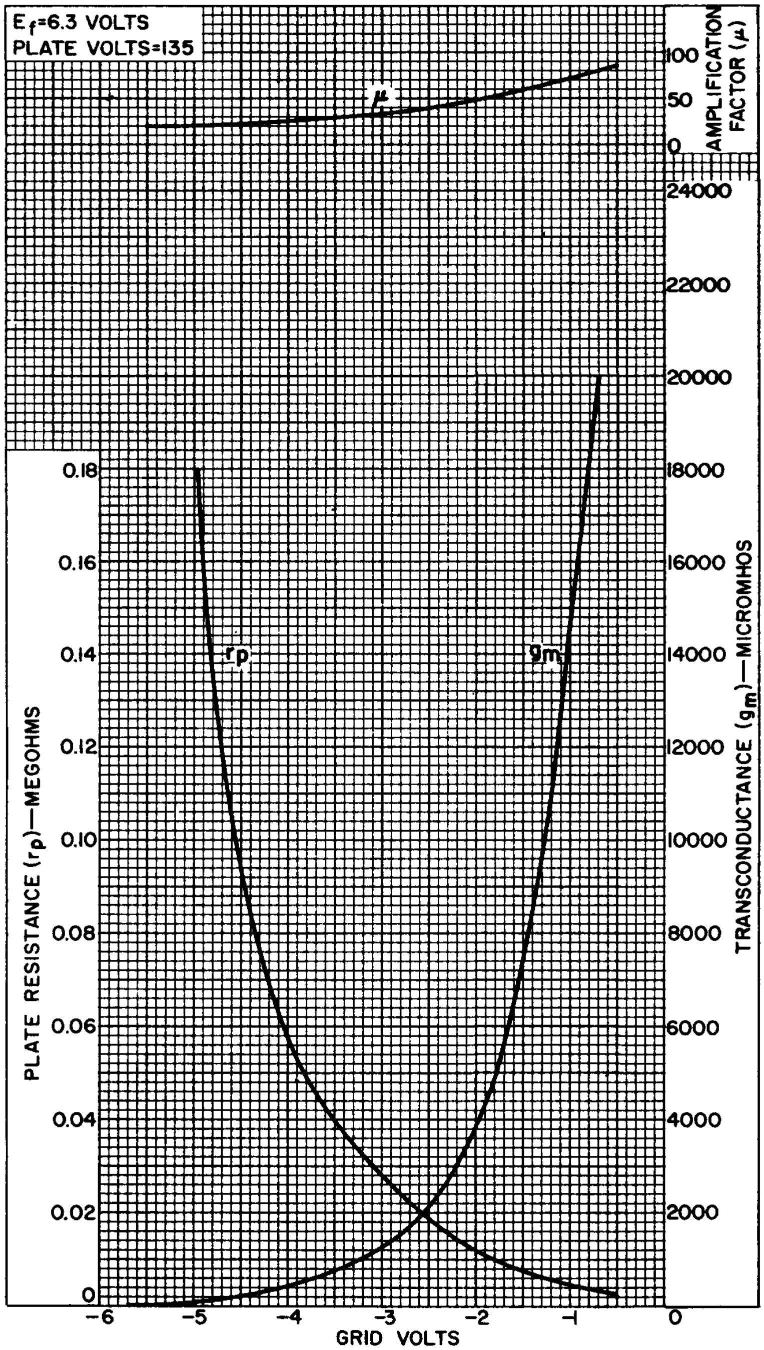
Plate Voltage	135	volts
Grid Voltage. . . . . .Adjusted for grid μa =	10	
Plate Load Resistance	1000	ohms
Amplification Factor.	80	
Plate Resistance (Approx.).	4000	ohms
Transconductance.	20000	μmhos
Plate Current	19	ma

Maximum Circuit Values:

Grid-Circuit Resistance:		
For fixed-bias operation.	1 max.	megohm
For cathode-bias operation.	1 max.	megohm

[a] With external shield JEDEC No.316 connected to cathode.

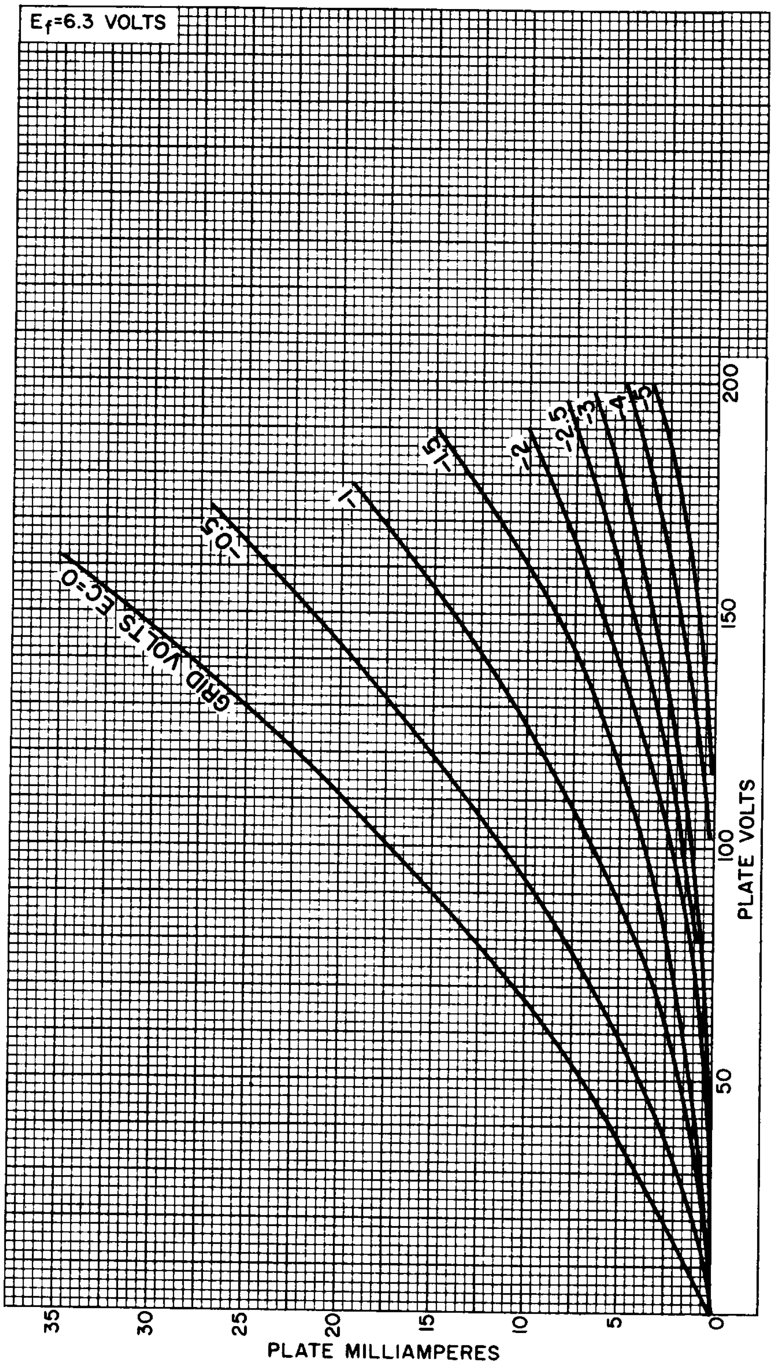
AVERAGE CHARACTERISTICS



92CM-12224

6HM5/6HA5

AVERAGE PLATE CHARACTERISTICS



92CM-12223